



Newmarket Rising Waters Workshop

Nov. 4, 2021

Photos: Newmarket Fire and Rescue Department

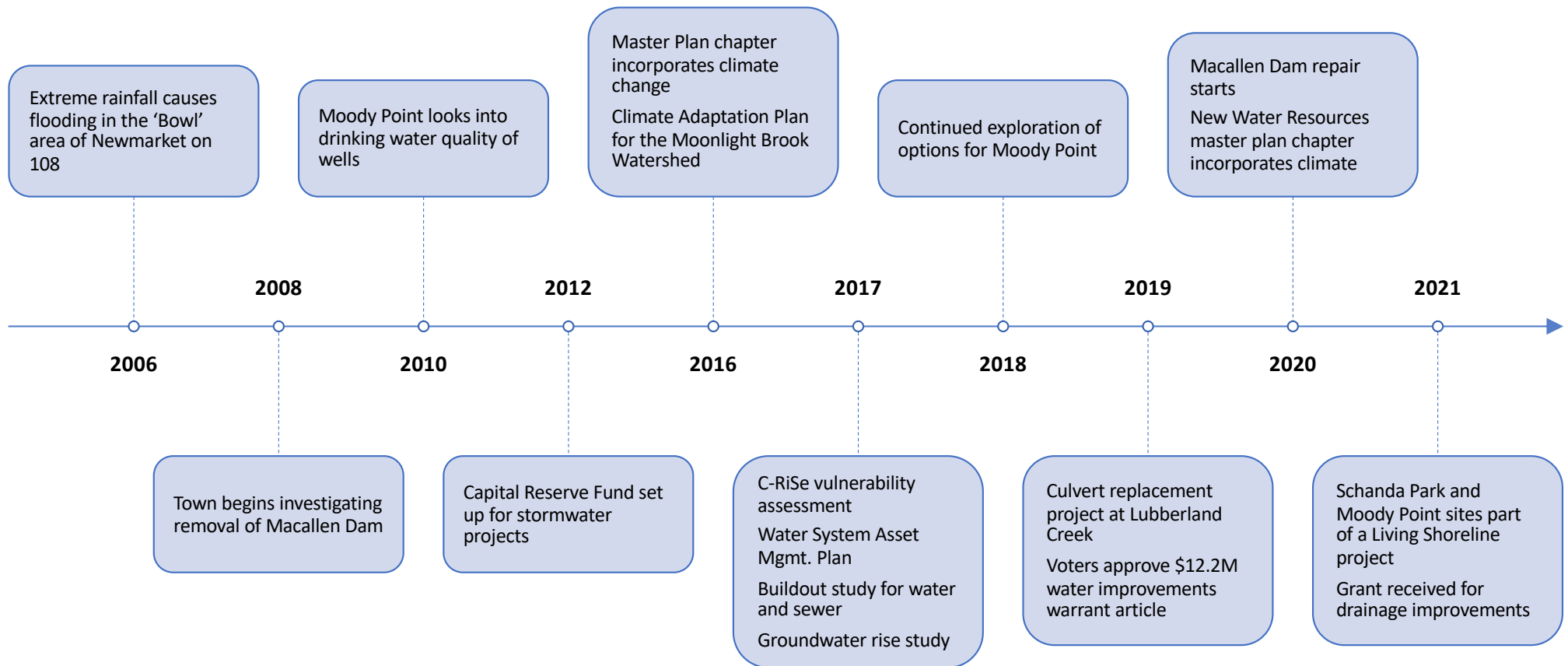
Agenda

- Newmarket's action on climate
- *NH Coastal Flood Risk Summary*
 - *Part I: Science*
 - Newmarket-specific maps
 - *Part II: Guidance for using scientific projections*
- Discussion

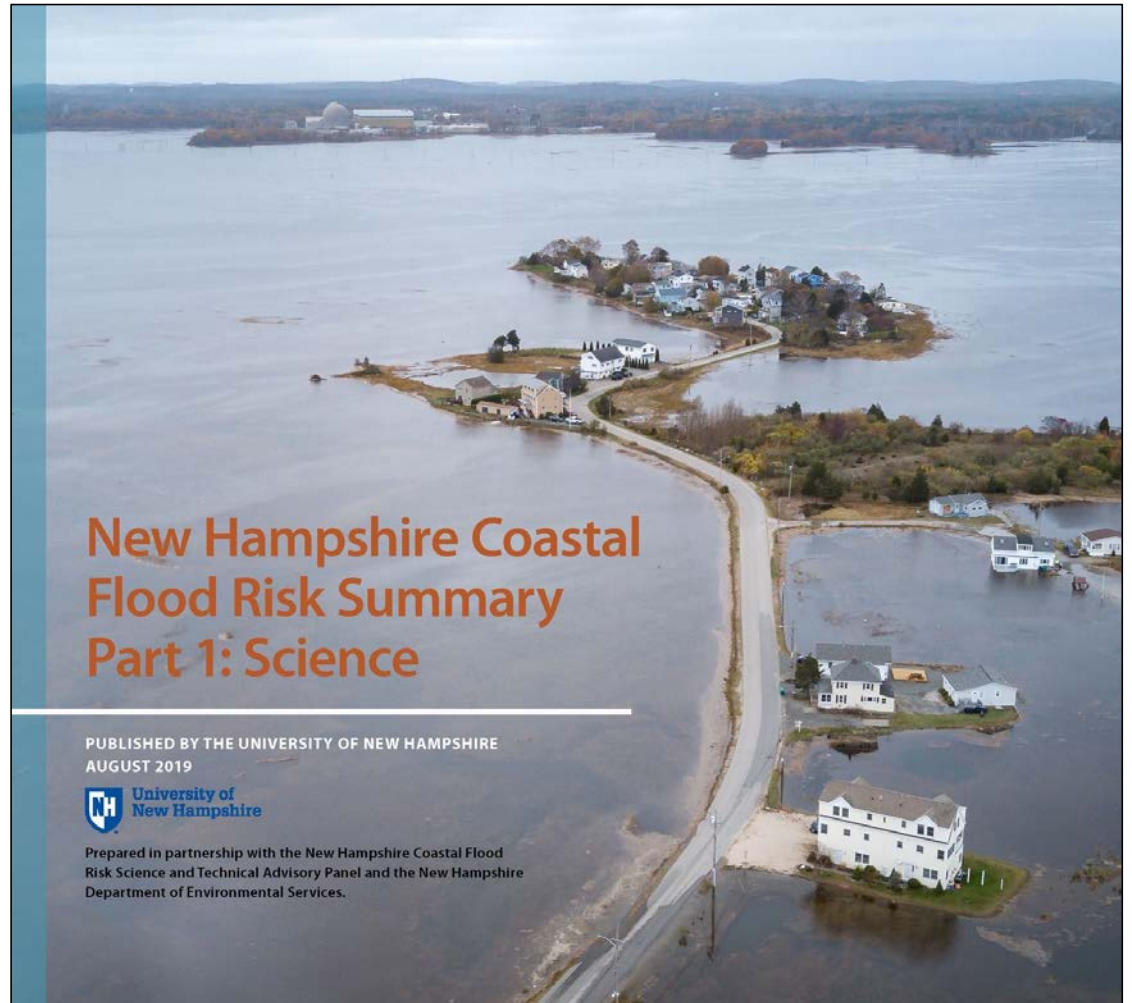


Photo: Newmarket Fire and Rescue Department

Newmarket's action on climate

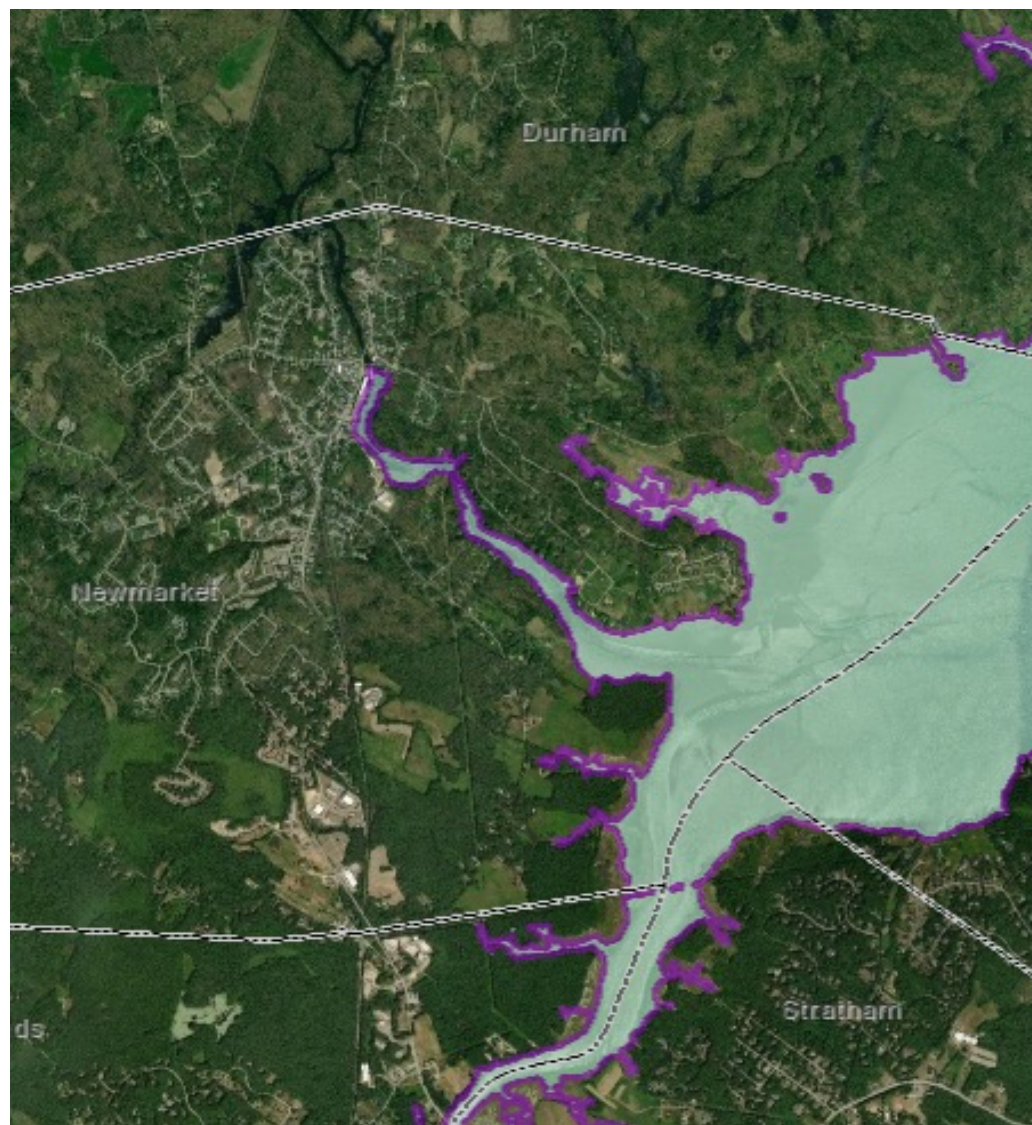


*NH Coastal
Flood Risk
Summary, Part I:
Science
(2019)*



Newmarket-specific maps

Mean Higher-
High Water
(MHHW)
baseline



+1' sea-level
rise



+2' sea-level
rise



+4' sea-level
rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

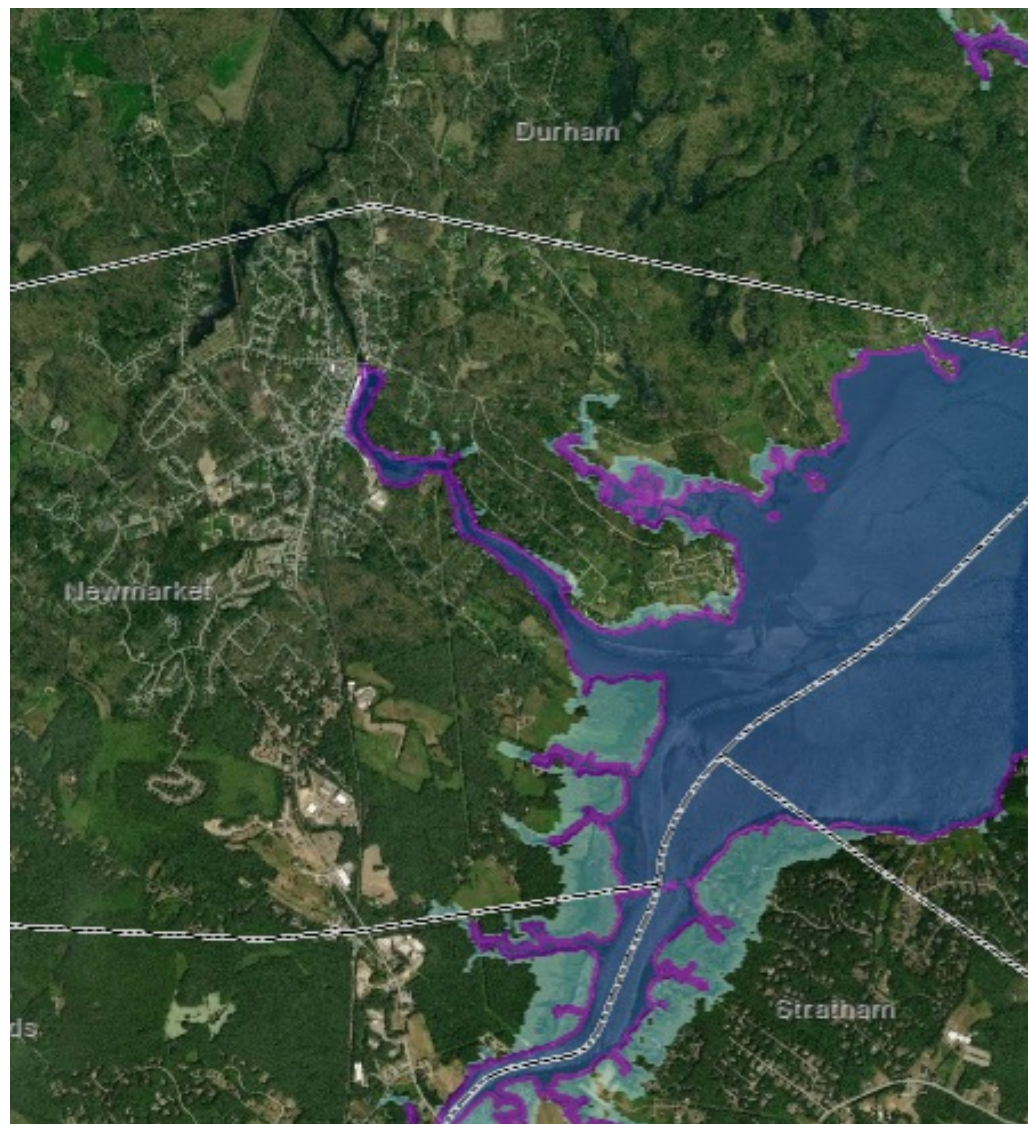
4 - 6

6 - 8

8 - 10

10 +

+6' sea-level
rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

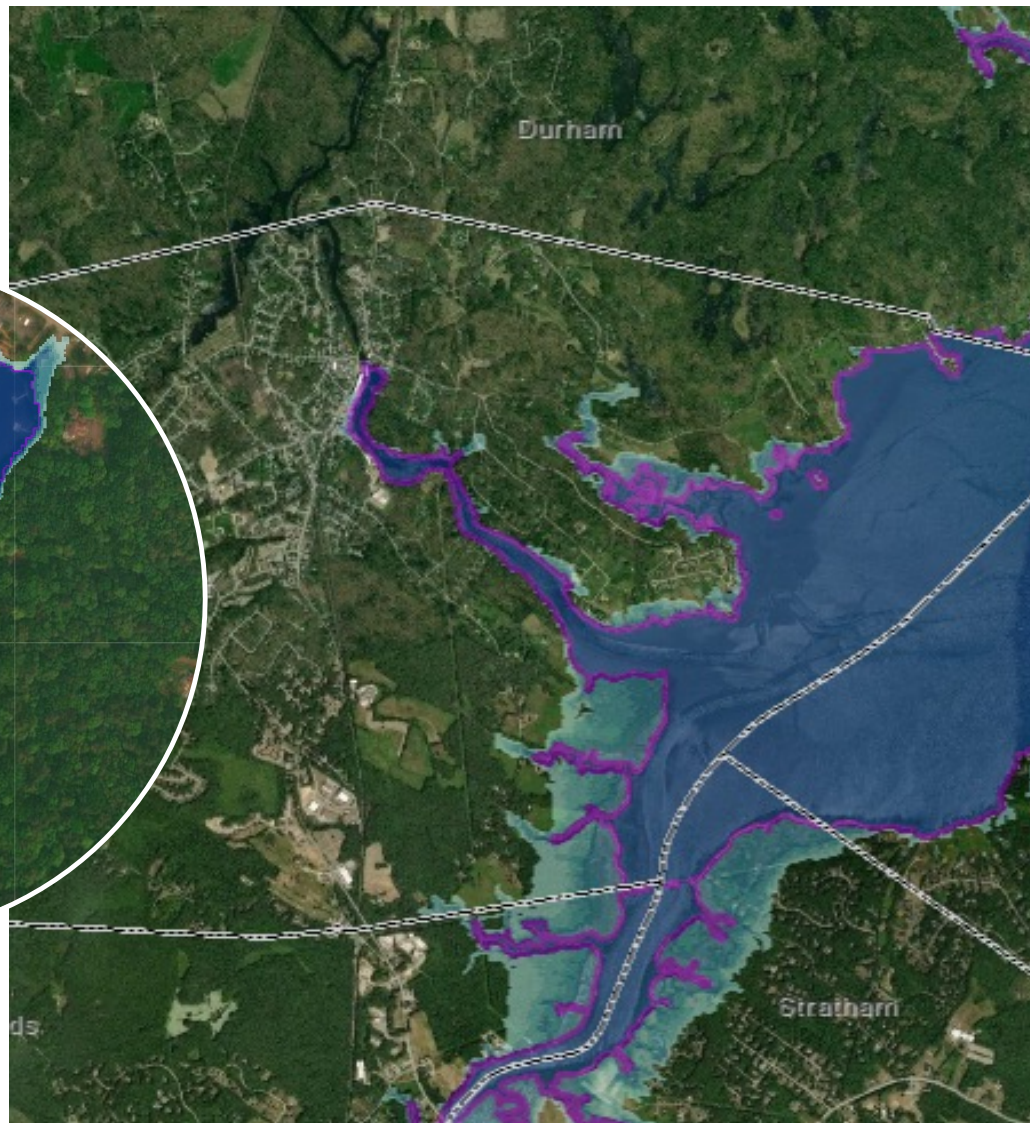
4 - 6

6 - 8

8 - 10

10 +

+8' sea-level
rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

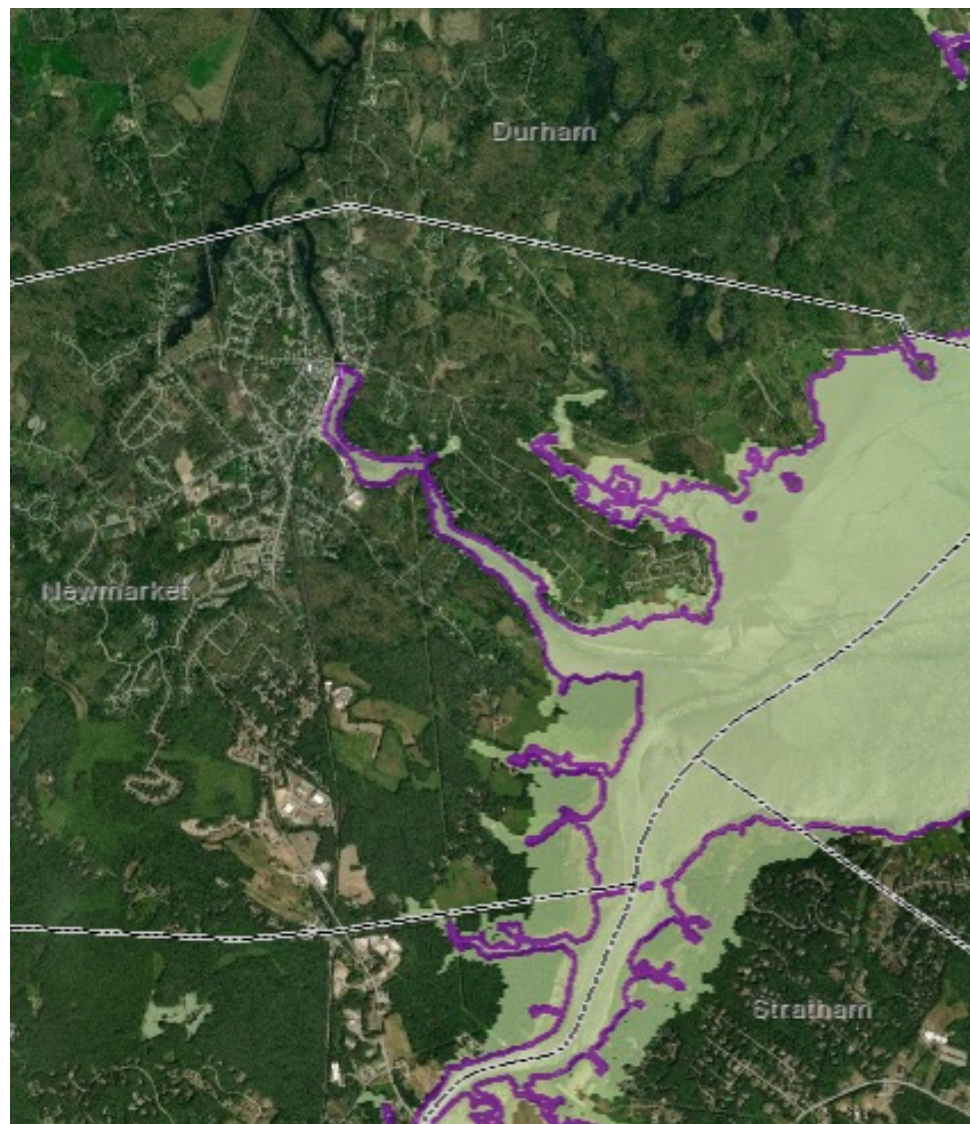
4 - 6

6 - 8

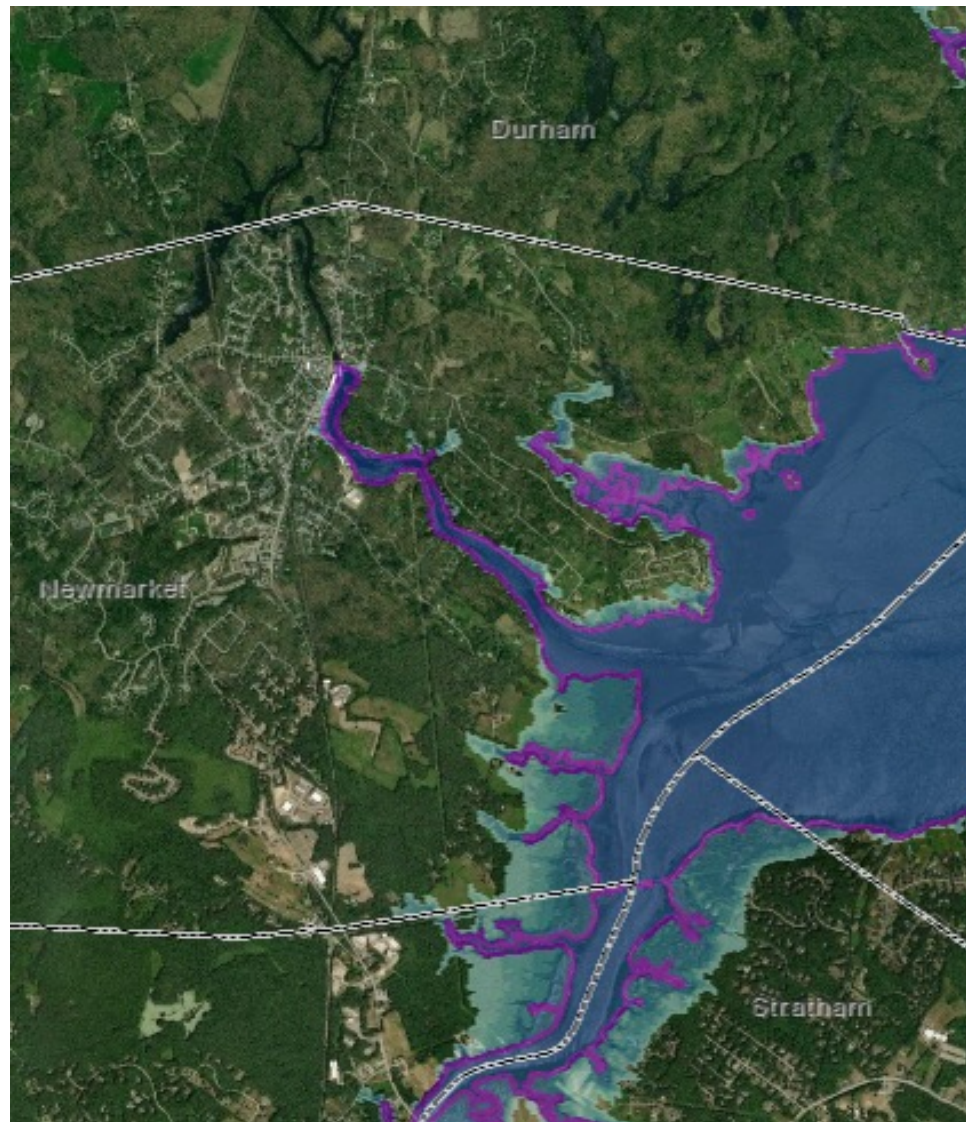
8 - 10

10 +

1% storm surge
baseline



Storm surge +
2' sea-level rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

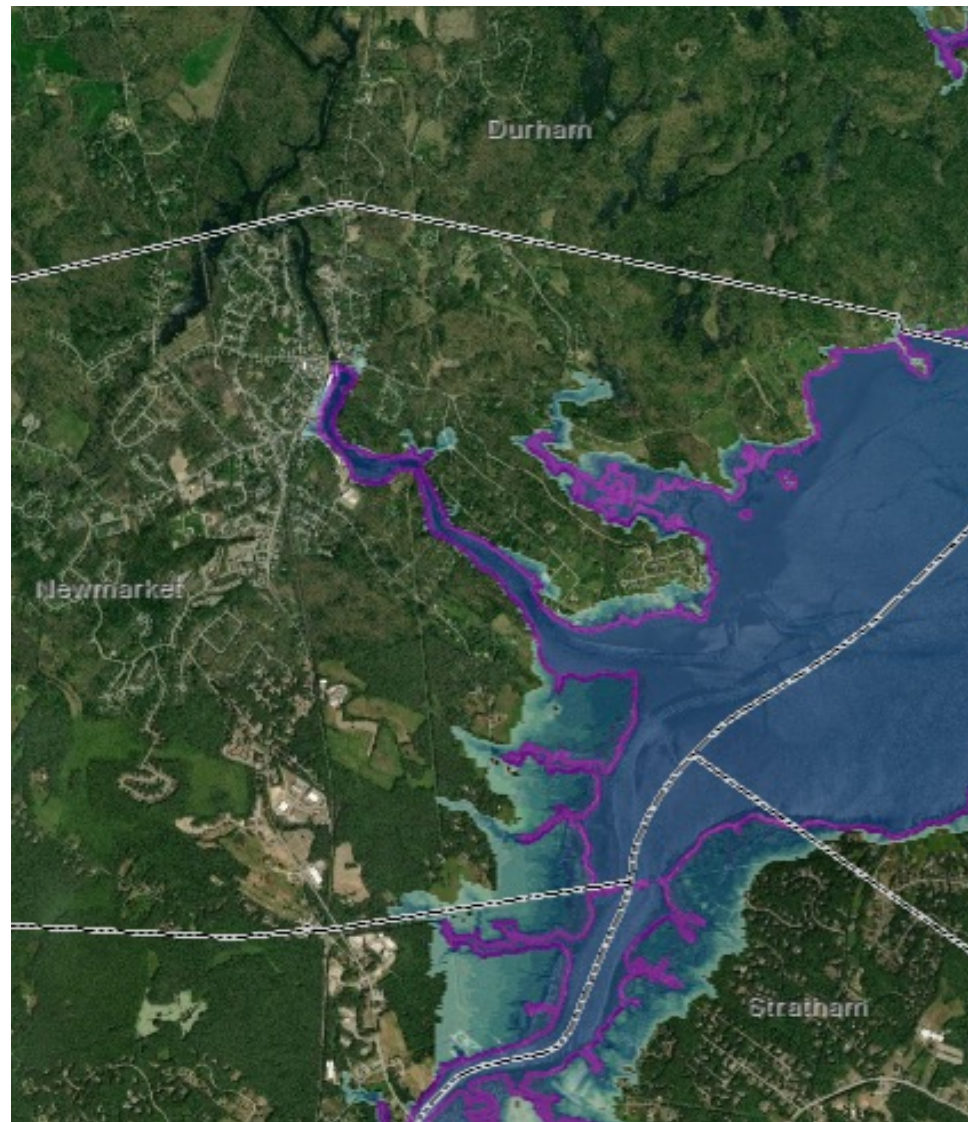
4 - 6

6 - 8

8 - 10

10 +

Storm surge +
4' sea-level rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

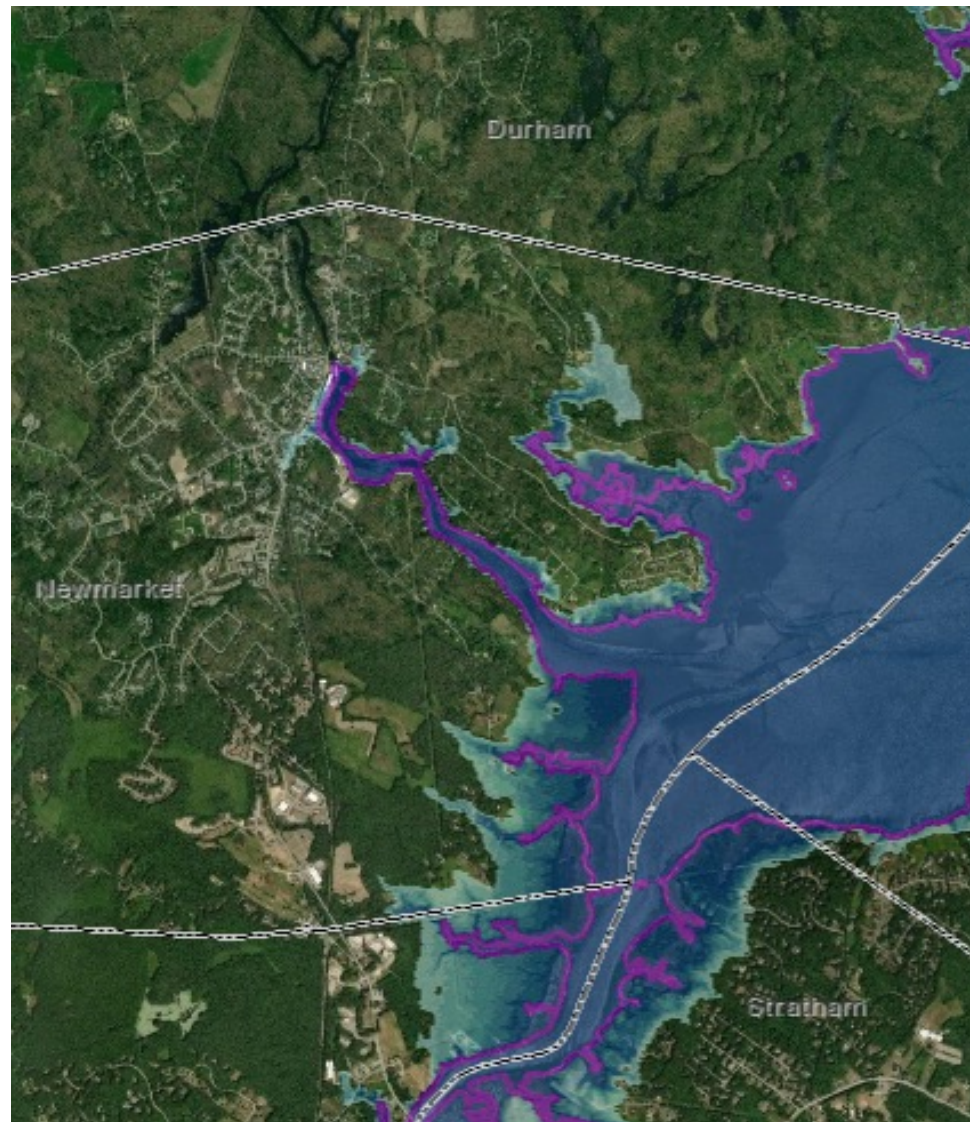
4 - 6

6 - 8

8 - 10

10 +

Storm surge +
6' sea-level rise



Estimated depth
of inundation (ft)

0 - 2

2 - 4

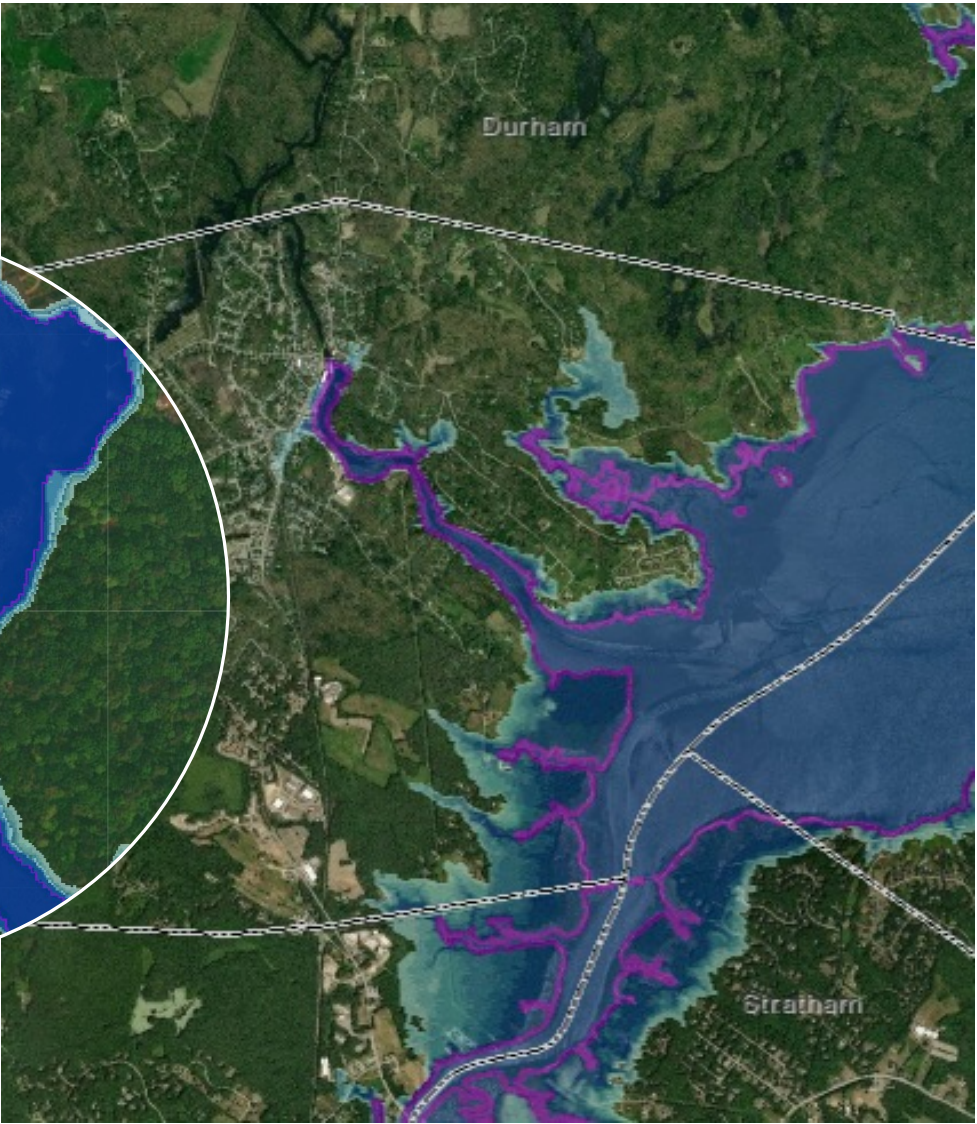
4 - 6

6 - 8

8 - 10

10 +

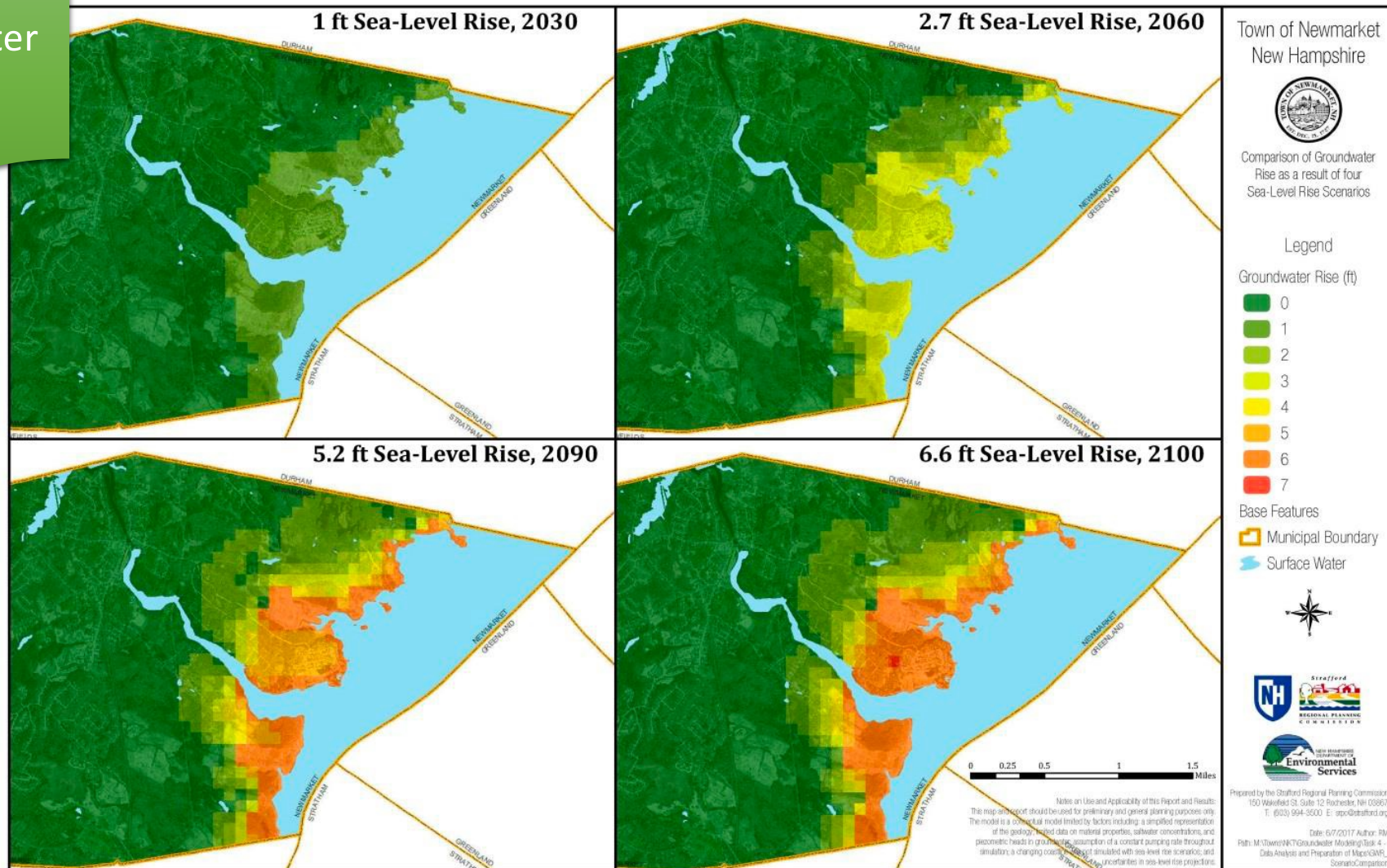
Storm surge +
8' sea-level rise



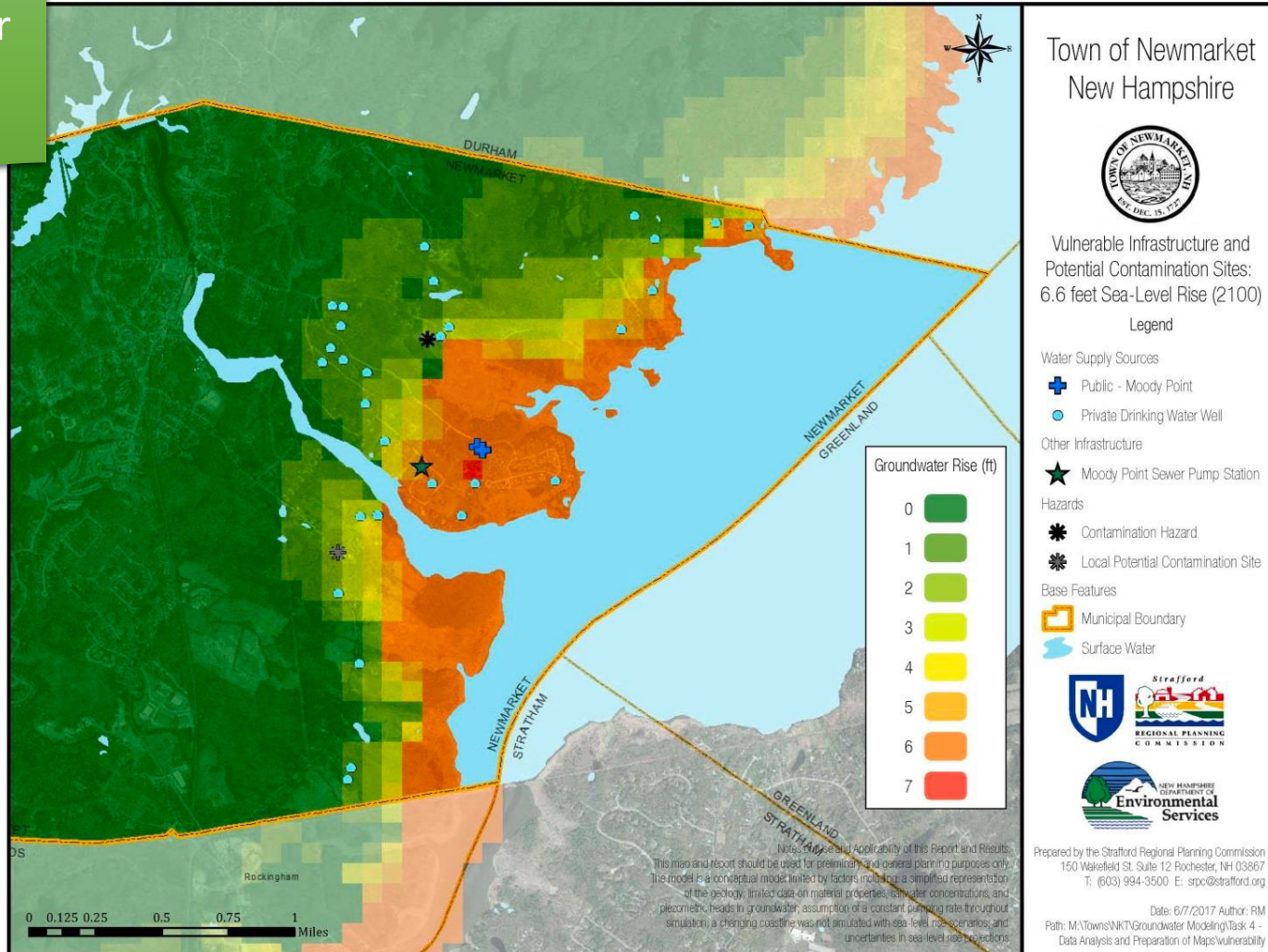
Estimated depth
of inundation (ft)

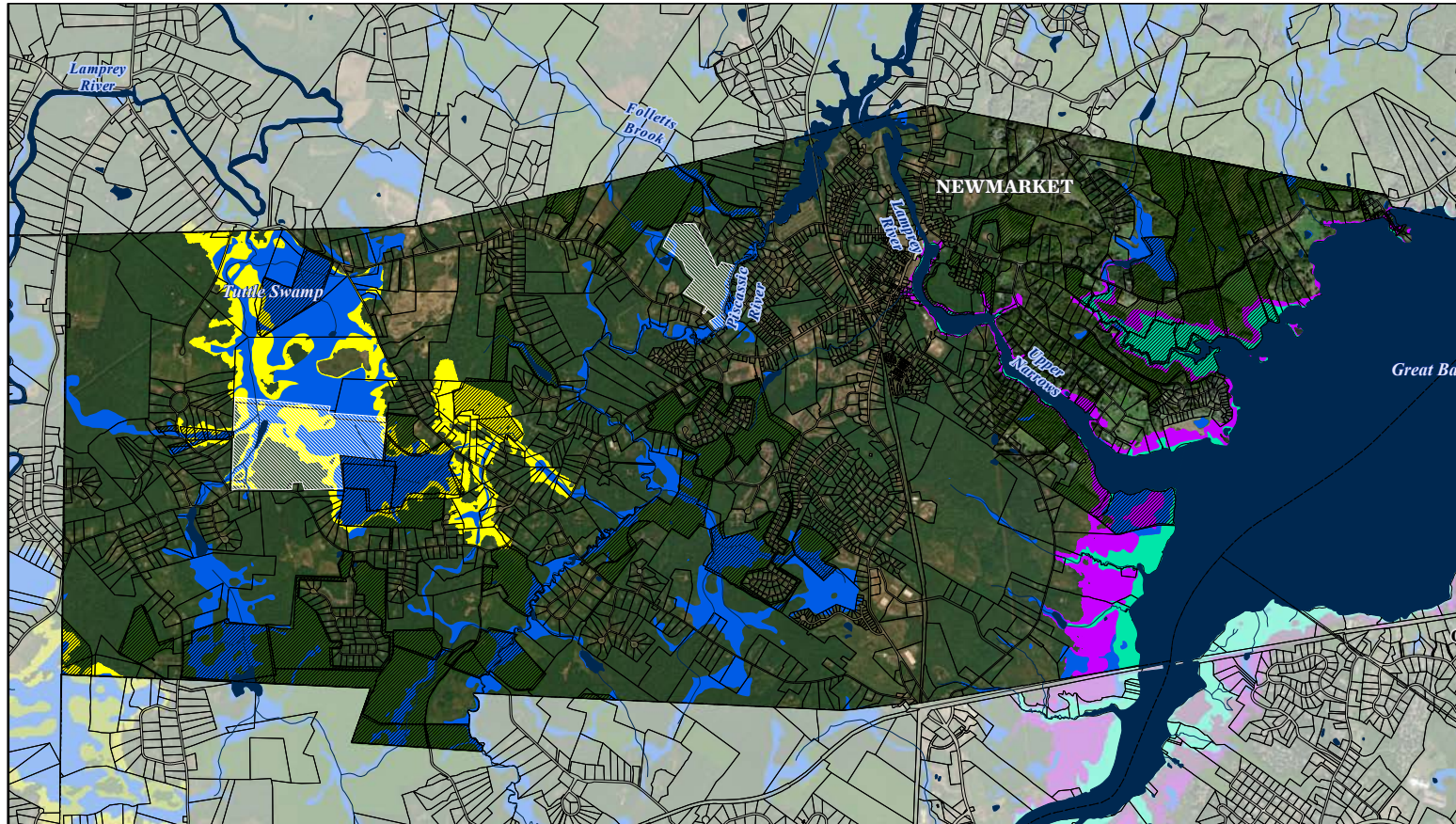


Groundwater rise



Groundwater rise

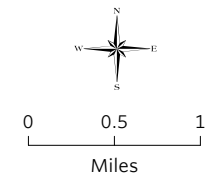




Land Conservation for Water Resource Protection

Flood Risk Reduction Opportunity Areas

Newmarket,
New Hampshire

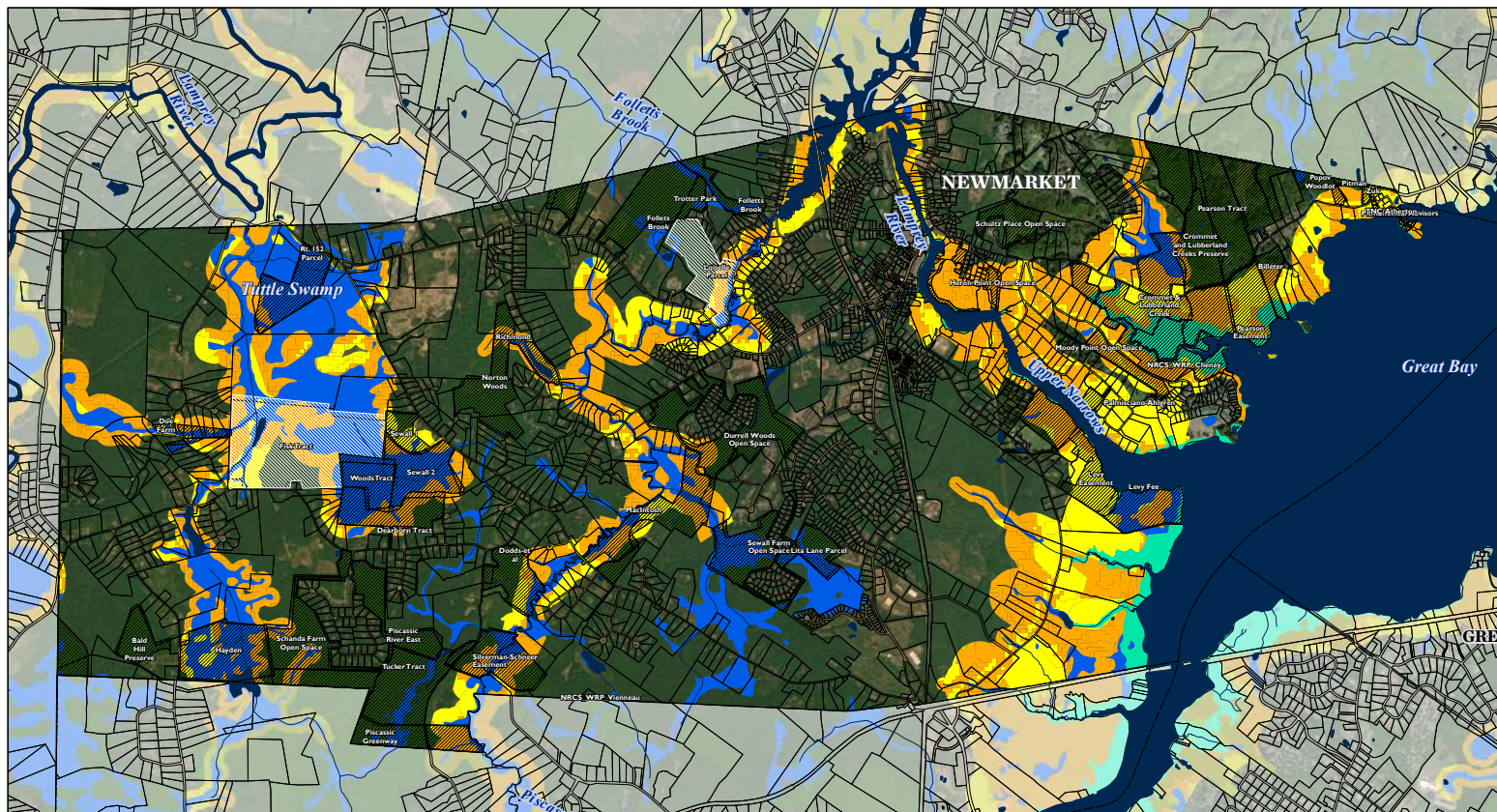


Legend

- Flood Storage Opportunity Areas
- Salt Marsh Migration Opportunity Area
- Conservation Land
- Public/Other Land
- Municipal Boundary
- Surface Water or Wetland
- Estuary
- Freshwater Wetland
- Open Water

Map created 4/17/2019 by:

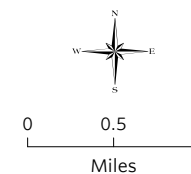
 The Nature Conservancy
 New Hampshire
 Data displayed from NH GRANIT,
 NHDES, & The Nature Conservancy.



Land Conservation for Water Resource Protection

Buffers for Water Quality Protection

Newmarket,
New Hampshire



Legend

Riparian Buffer Areas

- Restoration Priority
- Protection Priority

- Conservation Land
- Public/Other Land

Municipal Boundary

Surface Water or Wetland

- Estuary
- Freshwater Wetland
- Open Water

Map created 4/17/2019 by:
The Nature Conservancy
 New Hampshire
 Data displayed from NH GRANIT,
 NHDES, & The Nature Conservancy.

NH Coastal Flood Risk Summary, Part II: Guidance (2020)



New Hampshire Coastal Flood Risk Summary Part II: Guidance for Using Scientific Projections



Published by the University of New Hampshire
March 2020

Prepared in partnership with the New Hampshire Coastal Flood Risk Science
and Technical Advisory Panel, the University of New Hampshire, and the New Hampshire
Department of Environmental Services



Discussion

- How do you think you could use the NH Coastal Flood Risk Guidance in your work?
- How can this build on the work already done in Newmarket?